Work Order ID 83838

Thursday, April 26, 2012 1:08:38 PM

83838

Item ID: D4577-041

Revision ID:

Item Name: Fwd Access Panel Assembly

Accept *N900040100*

Setup Start *NS1*

Stop *NS2*

Start Date: 4/26/2012 **Start Qty:** 4.00 *4*

Required Date: 5/3/2012 **Req'd Qty:** 4.00 *4*

Cust Item ID:

Customer:

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MF **Date:** 12-04-26 **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D4577 **Revision Nbr:** B						(4)			
100 *100* Waterjet FLOW CNC Waterjet 6061 .125	FLOW WATER JET **Memo** 1-Cut D4577-5 as per Dwg Dwg Rev: B Prog Rev: B 2-Deburr if necessary	0.00 0.00							B12-4-27
110 *110* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 0.00							B12-4-27
120 *120* QC Quality Control	QC8- Inspect parts - second check **Memo**	0.00 0.00	5/2/4/30			(4)			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: __________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 83838 *83838*

Thursday, April 26, 2012 1:08:38 PM

Item ID: D4577-041 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Fwd Access Panel Assembly

Start Date: 4/26/2012 **Start Qty:** 4.00 *4* **Cust Item ID:**

Required Date: 5/3/2012 **Req'd Qty:** 4.00 *4* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Small Fab Small Fab	NC BRAKE **Memo** C'SINK HOLES AS PER DWG	0.00 0.00				4X	Ø		12/04/30
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00	S 12/04/30			(4)			
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 **Memo**	0.00 0.00				(4)		120430	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ PAR #: ______ Fault Category: ____________ NCR: Yes No DQA: _____ Date: ________

Resolution: ____________ Disposition: ____________ QA: N/C Closed: ________ Date: ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

Work Order ID 83838 *83838*

Thursday, April 26, 2012 1:08:38 PM

Item ID: D4577-041 **Accept** *N900040100* **Setup Start** *NS1* **Stop** *NS2*

Revision ID:

Item Name: Fwd Access Panel Assembly

Start Date: 4/26/2012 **Start Qty:** 4.00 *4* **Cust Item ID:**

Required Date: 5/3/2012 **Req'd Qty:** 4.00 *4* **Customer:**

Reference:

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______ **Run Start** *NR1*

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC7-Inspect Chemical Conversion Coat **Memo**	0.00 0.00				4	Ø		12.04.30
170 *170* Small Fab Small Fab	**Memo** Assemble as per dwg	0.00 0.00				4	Ø		12/05/04
180 *180* QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00 5/7/05				(40)			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 83838

Thursday, April 26, 2012 1:08:38 PM

83838

Item ID: D4577-041

Revision ID:

Item Name: Fwd Access Panel Assembly

Accept *N900040100*

Setup Start *NS1* **Stop** *NS2*

Start Date: 4/26/2012 **Start Qty:** 4.00 *4*

Required Date: 5/3/2012 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Run Start *NR1* **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 *200* Powdercoat Powder Coating M118533	Gloss Grey (4.3.5.15) per QSI 005 4.3	0.00				3X	Ø		M-L 12/05/09
	Memo *****Top side only***** START TIME: 2:00 OVEN TEMPERATURE: 320°F FINISH TIME: 2:30	0.00							
210 *210* QC Quality Control	QC3- Inspect Part Finish	0.00				3	Ø		[illegible] 12-5-9
	Memo	0.00							
220 *220* Packaging Packaging	Identify as per dwg & Stock Location: 237A	0.00				3			12/5/09
	Memo	0.00							

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Work Order ID 83838
Thursday, April 26, 2012 1:08:38 PM

83838

Item ID: D4577-041
Revision ID:
Item Name: Fwd Access Panel Assembly

Accept *N900040100*

Setup **Start** *NS1*
Stop *NS2*

Start Date: 4/26/2012 **Start Qty:** 4.00 *4*
Required Date: 5/3/2012 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Run **Start** *NR1*
Stop *NR2*

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______
QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 *230*	QC21- Final Inspection - Work Order Release	0.00					12/5/10		
QC Quality Control	**Memo**	0.00							

MC
12-05-10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, April 26, 2012 1:08:38 PM

Work Order ID: 83838

Parent Item: D4577-041

Parent Item Name: Fwd Access Panel Assembly

Start Date: 4/26/2012 **Required Date:** 5/3/2012

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP REV:A 12.03.08 NEW ISSUE DD VERF:EC IPP REV:B 12.04.25 AS PER DWG REV.B DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.125 6061-T6 .125 Sheet		Purchased	No			100	sf	113.1500	**0.767**	**3.2294737**			
MS20426AD3-5 Rivet		Purchased	No			170	Each	12,426.000	**10**	**40**			
NAS1474R3 Anchor Nut		Purchased	No			170	Each	0.0000	**1**	**4**			

M6061T6S.125 locations:

Location	Loc Qty	Loc Code
MAT021	113.15	
120218	3.21	
121473	109.94	

MS20426AD3-5 locations:

Location	Loc Qty	Loc Code
ST316	12426	
4179	612	
4444	5654	
4533	6160	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

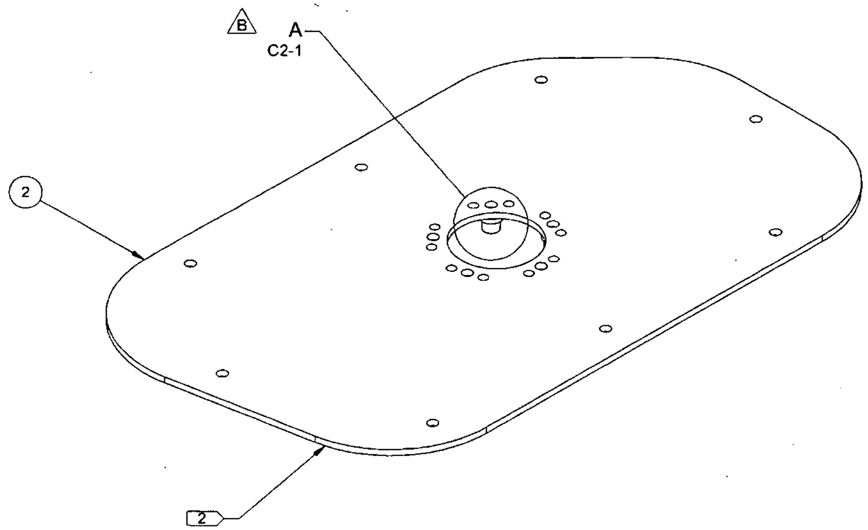
Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

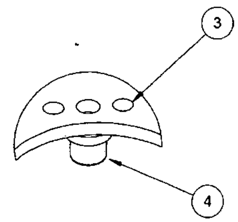
NOTE: Date & initial all entries

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ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4577-041	FWD ACCESS PANEL ASSEMBLY
2	1	D4577-5	FWD ACCESS PANEL
3	10	MS20426AD3-5	RIVET
4	5	NAS1474R3	ANCHOR NUT (ALTERNATE P/N NAS1474A3, NAS1474S3, OR NAS1474F3



D4577-041 FWD ACCESS PANEL ASSEMBLY



DETAIL A

C5-1

RELEASED 2012-04-24

#83838

REV.	DESCRIPTION	BY	DATE
B	REMOVE D4001-1; ADD NAS1474R3, ZN C2-1. MODIFY -5 FOR HARDWARE, ZN C5-4. INCREASE THICKNESS OF -1/-3/-5; IS 0.125", WAS 0.063". MODIFY DIMS OF -1/-3/-5.	DC	12.03.30
A	NEW ISSUE	DC	12.01.30

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT "ANSI 61 GREY" (4.3.5.15) PER DART QSI 005 4.3 TOP SIDE ONLY
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.06 lbs

DESIGN	DC
DRAWN	DC
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	12.03.30

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4577 — REV. B — SHEET 1 OF 4

TITLE: ACCESS PANEL — SCALE: NTS

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

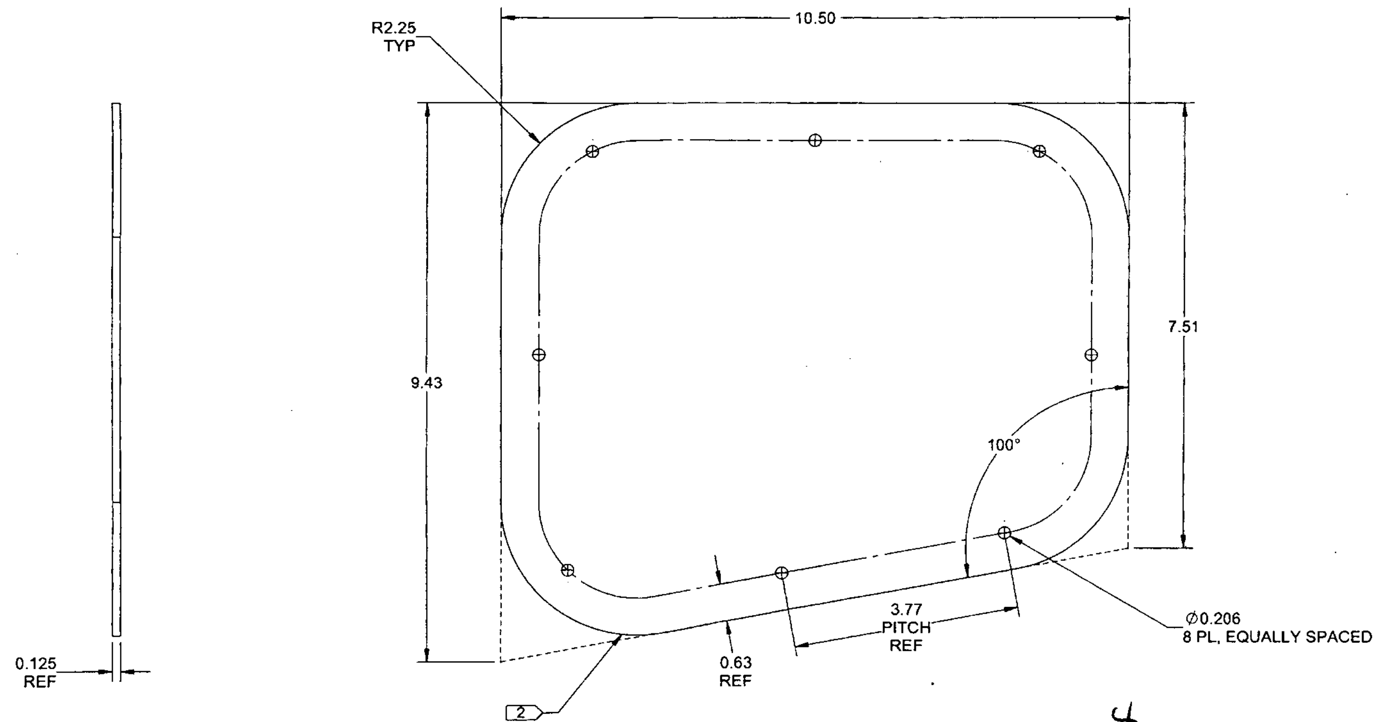
Part No: ______________________ **PAR #:** _______ **Fault Category:** ___________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ______________________ **Disposition:** ______________________ **QA: N/C Closed:** __________ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE



B D4577-1 REAR ACCESS PANEL

#83838

RELEASED 2012-04-24

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.125 THK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.125
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "ANSI 61 GREY" (4.3.5.15) PER DART QSI 005 4.3 TOP SIDE ONLY
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.03 lbs

DESIGN	DC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	DC	
CHECKED		DRAWING NO. D4577 — REV. B — SHEET 2 OF 4
MFG. APPR.		
APPROVED		TITLE: ACCESS PANEL — SCALE: NTS
DE APPR.		
DATE	12.03.30	

Dart Aerospace Ltd

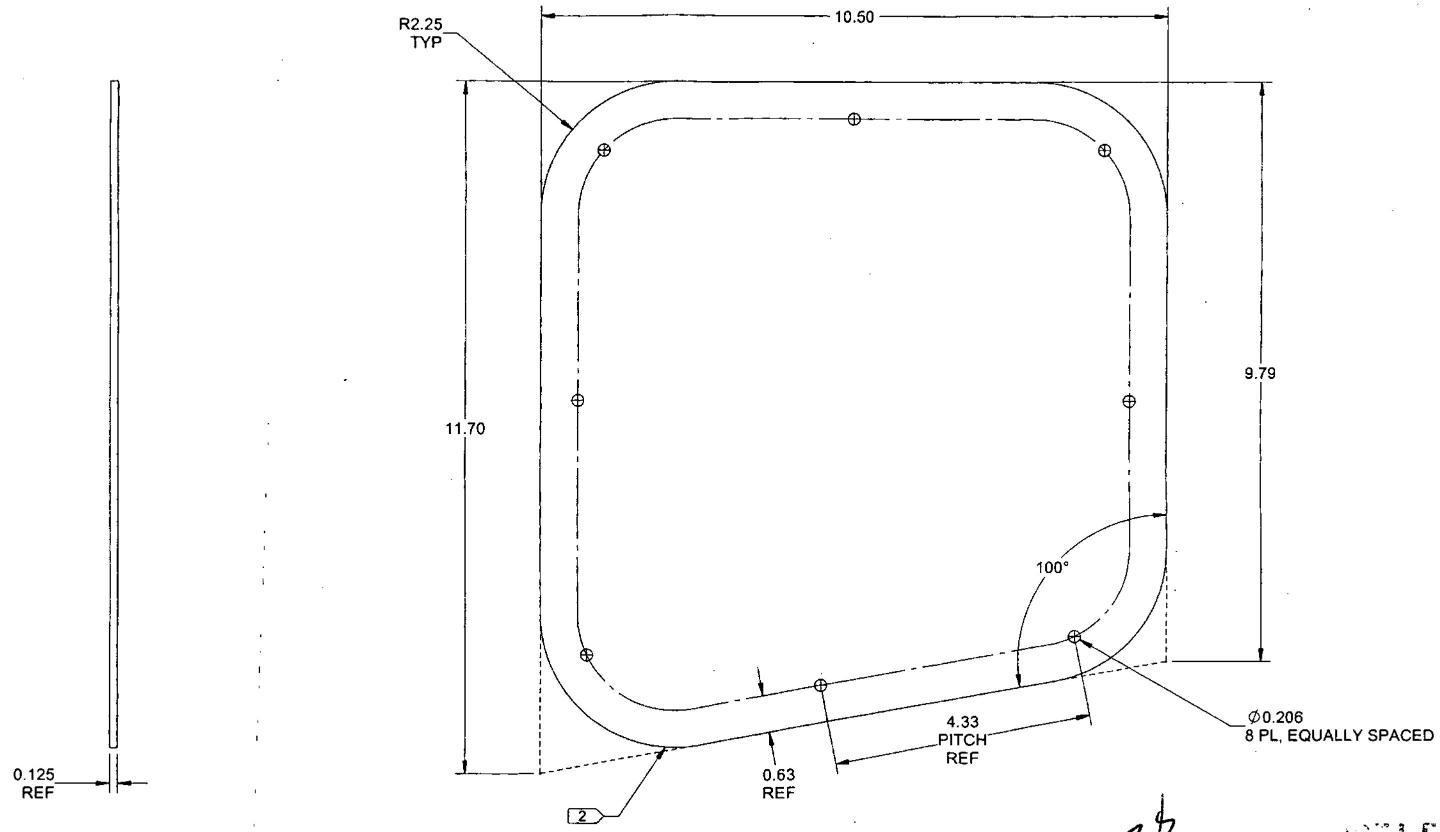
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ____________________ Disposition: ____________________ QA: N/C Closed: __________ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



B D4577-3 MIDDLE ACCESS PANEL

#83838

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.125 THK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.125
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "ANSI 61 GREY" (4.3.5.15) PER DART QSI 005 4.3 TOP SIDE ONLY
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.32 lbs

DESIGN	DC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	DC	DRAWING NO. D4577 REV. B SHEET 3 OF 4
CHECKED	[illegible]	
MFG. APPR.	[illegible]	
APPROVED	[illegible]	TITLE ACCESS PANEL SCALE NTS
DE APPR.	[illegible]	
DATE	12.03.30	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

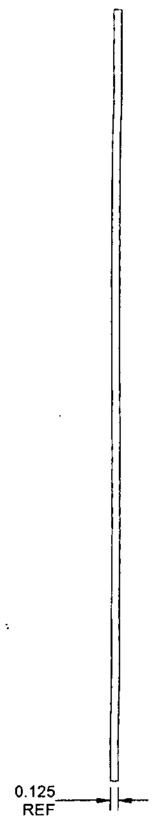
Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

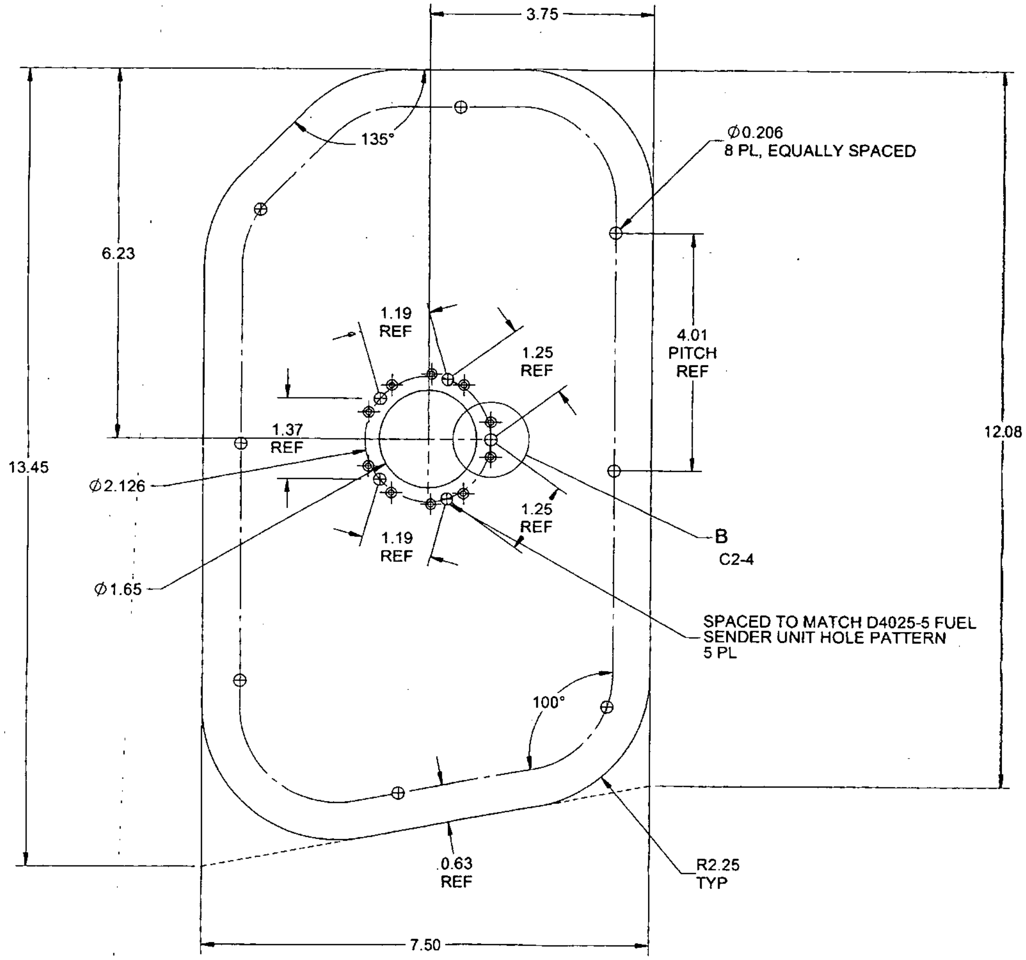
Resolution: ___________________ **Disposition:** ____________________ **QA: N/C Closed:** __________ **Date:** _________

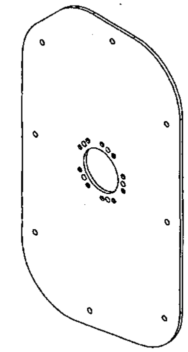
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

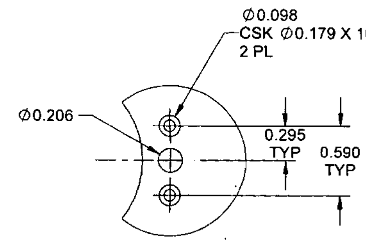
NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE









DETAIL B
(5 PL)
C5-4

#83838 RELEASED 2012-04-24

NOTES:
1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.125 THK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.125
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.06 lbs

(B) **D4577-5 FWD ACCESS PANEL**

DESIGN	JC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	JC	
CHECKED	[illegible]	DRAWING NO. D4577 — REV. B — SHEET 4 OF 4
MFG. APPR.	[illegible]	
APPROVED	[illegible]	TITLE ACCESS PANEL — SCALE NTS
DE APPR.	[illegible]	
DATE	12.03.30	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ PAR #: ______ Fault Category: ______________ NCR: Yes No DQA: _____ Date: ________

Resolution: ______________ Disposition: ______________ QA: N/C Closed: ________ Date: ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

DART AEROSPACE LTD	Work Order: 83838
Description: FWD ACCESS PANEL ASSEMBLY	Part Number: D4577-041
Inspection Dwg: D4577-8 . Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [X] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .098	+.004 -.001	.101	✓		V BB	
Ø .206	+.005 -.001	.206	✓		V	
Ø 1.65	+.012 -.001	1.654	✓		V	
Ø 2.126	+.012 -.001	2.126	✓		V	
7.50	+/- .030	7.520	✓		V	
3.75	+/- .030	3.758	✓		V	
6.73	+/- .030	6.736	✓		V	
4.01	+/- .030	4.016	✓		V	
.295	+/- .010	.294	✓		V	
.590	+/- .010	.589	✓		V	
1.19	+/- .030	1.187	✓		V	
1.25	+/- .030	1.243	✓		V	
1.37	+/- .030	1.365	✓		V	
.63	+/- .030	.626	✓		V	
.125	+/- .010	.124	✓		V	

Measured by: BB	Audited by: S	Prototype Approval:
Date: 12-4-27	Date: 12/4/30	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	